ITEMS

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RECOMMENDED POLICIES FOR THE MATHEMATICAL TRAINING OF SOCIAL SCIENTISTS: STATEMENT BY A COMMITTEE OF THE COUNCIL*

RECENT developments in various fields of social science have created demands for mathematical training that are not satisfied by traditional curricula in mathematics. The purpose of this statement of policy is to analyze the problems involved in meeting these needs, and to suggest an approach which would be advantageous not only to students preparing for careers as social scientists but also to persons destined for many other vocations. To the latter end, the suggested program is designed to have intrinsic educational value and at the same time to equip students to pursue further study in specialized branches of mathematics, if they so desire.

Three ways of meeting the needs of social scientists for mathematics can be considered:

A special curriculum in mathematics for social science students;

Separate sections in mathematics courses, following the traditional curriculum but introducing illustrative materials and exercises based on social science problems;

A revised curriculum in "universal mathematics," arranged to provide suitable basic mathematical training for students who may or may not ultimately spe-

cialize in mathematics, physical sciences, engineering, biological or social sciences.

The recommendations which follow are oriented primarily toward the first of these approaches, with the expectation that the materials presented may be helpful also in institutions in which the adoption of some other approach or combination of approaches is dictated by circumstances.

A satisfactory program in mathematics must be compatible with the broader educational objectives of colleges and universities. The curriculum here proposed is so designed that an undergraduate who completes the two-year sequence will be able to continue work in mathematics if he chooses, while one who discontinues his study of mathematics at that point or earlier may still count his time well spent. The committee has tried not to overstress matters that are mainly of interest to mathematicians, and also to avoid the fallacy of minimizing the difficulties in mathematical training.

The committee will welcome criticism of its statement and will be especially grateful for suggestions concerning the practical problems involved in putting its recommendations into effect. Comments may be addressed to the chairman, William G. Madow, Department of Mathematics, University of Illinois, Urbana.

BASIC CONSIDERATIONS

A large and growing number of social scientists wish to acquire mathematical training, but they are primarily interested in mathematics as a means of dealing with social science problems rather than as an end in itself. A program appropriate to their needs should differ

[•] The members of the Council's Committee on Mathematical Training of Social Scientists are: William G. Madow, University of Illinois (chairman); E. P. Hutchinson, University of Pennsylvania; Jacob Marschak, University of Chicago; George A. Miller, Harvard University; Frederick Mosteller, Harvard University; Robert M. Thrall, University of Michigan; staff, Elbridge Sibley. The committee was appointed in December 1952 to continue the work of the 1952 interuniversity summer research seminar on the development of source materials for the mathematical training of social scientists, and to sponsor summer institutes to provide such training. The first institute was held in the summer of 1953 (see Items, March 1953, p. 8, and June 1953, pp. 23-24). Two institutes are to be held in 1955, as reported on pp. 23-24 infra.

from the conventional mathematics program both in the mathematical topics included or emphasized, and in the use of exercises and illustrative materials drawn from the social sciences. It is fortunately not necessary to argue whether social scientists ought to study mathematics since the demand already is sufficient to justify the offering of suitable courses. Among the specific reasons given by social scientists for their desire for mathematical training are the following:

To understand nonmathematical statistics.

To prepare for the study of mathematical statistics.

To read social science literature in which mathematics is used.

To communicate professionally with mathematicians and mathematical statisticians.

To formulate, work with, and analyze social science problems with the aid of mathematics (i.e., to formulate, work with, and analyze mathematical models).

To solve mathematical problems arising in the social sciences.

To recognize both the usefulness and the limitations of the mathematical method, and to identify problems in the solution of which consultation with a mathematician or statistician would be desirable.

To understand the nature of mathematical concepts and mathematical reasoning.

To overcome personal psychological obstacles to the use of mathematics.

The varied disciplinary specialties and individual interests of social scientists are reflected in both qualitatively and quantitatively differing needs for mathematical knowledge or skills. Hence the recommended program in mathematics is somewhat flexible.

In advising students on the selection of courses of study, it is well to recognize that whereas some other subjects can readily be learned outside the classroom, formal instruction is essential in mathematics. Therefore students who may eventually need mathematics should be urged to enroll in mathematics courses as early as possible.

The traditional undergraduate curriculum in mathematics—college algebra, trigonometry, analytic geometry, and calculus—does not afford satisfactory preparation to social scientists or to students in various other fields. Many mathematicians recognize this deficiency; and a committee of the Mathematical Association of America is preparing recommendations for revision of the undergraduate curriculum.

The importance of cooperation between social science and mathematics departments in efforts to improve the mathematics curriculum can scarcely be overemphasized. The ability to guarantee the enrollment of one or more sections of social science students for an alternative curriculum will greatly strengthen such efforts. Furthermore, mathematics departments should be encouraged to appoint mathematicians and statisticians who are actively interested in social science problems. Joint faculty appointments by mathematics and social science departments may sometimes be feasible.

The recommendations of the committee also take into account the following considerations:

An undergraduate's decision to major in social science is frequently not made before the junior year in college.

The decision to do research in a social science is usually not made until the senior year or later.

Many undergraduate students in social science will not find satisfactory mathematical training available at their colleges, and will want to obtain it as graduate students or even later. Thus, although the basic problem of mathematical training is an undergraduate problem, it will be necessary for many years to provide opportunities in graduate schools and summer sessions for the mathematical training of those who do not obtain satisfactory mathematical training while in college.

Arrangement of course content so as to present at an early stage types of material of fairly immediate interest to social scientists should facilitate both learning of and liking for mathematics, and encourage greater numbers of social scientists to undertake more advanced mathematical training.

Existing programs in statistics are not within the scope of the committee's recommendations. Applications of mathematics to social phenomena will frequently use both probability and statistics. Consequently lectures on probability theory, including an introduction to the problem of statistical inference, are suggested. Statistics courses can build solidly on the material presented in the fundamental mathematics courses.

The nature and organization of the mathematical training that is possible will continue to vary considerably from department to department and from institution to institution.

The effects of the proposed program should be viewed as being cumulative. Its full value can be realized only after several years.

That some students will tend to overstress their mathematical knowledge, to use technique in place of thought, and to limit themselves to problems that can be solved mathematically must be anticipated. These dangers will be reduced as more and more social scientists study mathematics and more critical evaluation of their work ensues.

Improvement of high school as well as college training in mathematics is needed, and it is to be hoped that this will be undertaken by appropriate agencies.

RECOMMENDATIONS FOR UNDERGRADUATE MATHEMATICAL TRAINING

The First-Year Course in Mathematics. Every undergraduate who thinks he may later decide to concentrate in a social science should be advised or required to take at least one year of mathematics as a freshman or sophomore. This policy will not apply with equal force to all social sciences. Departments of history and anthropology may not wish to advise students to study mathematics, while some departments of economics or psychology may require such study. Courses in mathematics should therefore be given on a level such that most students may be required or at least strongly advised to take them, and not on a level suitable for only a few students. The first-year course should have educational value in itself, and should prepare students who wish to study more mathematics. It is important to avoid the danger of spending too much time teaching what mathematics is about and too little teaching mathematics itself.

The course should be given by the mathematics department and should meet at least 3 hours a week during the academic year. Secondary school plane geometry and intermediate algebra should be prerequisites for this course.

An outline of one of many possible appropriate courses for social scientists is given below. Assuming a minimum of 80 hours of lectures, the following approximate distribution of hours by major subject matter is recommended:

Logic and set theory, including the algebra of sets —10 hours.

Relations, including order relations-10 hours.

Axiom systems and the nature of mathematical models —10 hours.

Functions: linear, quadratic, polynomial, rational, trigonometric, exponential and logarithmic functions, including computations—15 hours.

Introduction to the calculus-35 hours.

In this course, functions and the calculus may be combined. Also, some probability might be given during the first year by reducing the amount of time spent on other subjects. Considerable differences of opinion as to details must be anticipated. It is important that both the problems and illustrations have social science content.

The Second-Year Course in Mathematics. Students who decide to major in a social science should be advised to take a second year of mathematics as soon as possible. As in the case of the first-year course, this policy will not apply with equal force to all social sciences. The second-year course should also be given by the mathematics department, and should meet at least 3 hours

a week during the academic year. The first-year course described above should be prerequisite.

Assuming a minimum of 80 hours of lectures, the following approximate distribution is recommended:

Continuation of the calculus-30 hours.

Probability-30 hours.

Matrix theory-20 hours.

This course should prepare students for further courses in the mathematics department; hence, for example, the emphasis on the calculus. If sufficient students are available, a course might be offered on topics from advanced calculus for social scientists; this course would include finite differences, difference equations, and differential equations as well as additional material on partial differentiation and multiple integration.

In both the first- and second-year courses the treatment of mathematics should include some rigor and some intuition. Both are necessary. The balance between the two will depend on the students and instructors.

With respect to the relative stress placed upon pure mathematics and upon the application of mathematics in the social sciences, there may be differences among institutions. At the outset, emphasis on applications may be needed to motivate students who are primarily interested in social science, and who are studying mathematics with a view toward application. Furthermore, training in abstract mathematics does not automatically transfer itself to training in applied mathematics. On the other hand, there is danger that too much time spent on details of social science content will lead to inadequate mathematical training.

INTEGRATION OF MATHEMATICAL AND SOCIAL SCIENCE TRAINING

At both the undergraduate and graduate levels, the integration of mathematical and social science training must not be left to the mathematics department; social science departments must assume at least joint responsibility. Two possible procedures are suggested: (1) Social science departments should offer courses or sections of courses for which mathematical training would be prerequisite, and in which mathematics would be used wherever helpful. (2) Departmental or interdepartmental courses or seminars on applications of mathematics in the social sciences should be given. Such courses should serve to interest students of mathematics and statistics in the social sciences. To this end, it would be advisable to give these courses for several years even for a very small number of students. These courses should stress the translation of social science problems into mathematical form. Some of this translation should also be done in the mathematics courses, but there time will not permit as much as is desirable.

For students who know that their future need of mathematics will be limited, social science departments should continue to offer courses in quantitative methods in which some mathematics is included. However, such courses do not ordinarily prepare a student either for further training in mathematics or for reading the social science literature in which more than very elementary mathematics is used.

MATHEMATICAL TRAINING OF GRADUATE AND POSTDOCTORAL STUDENTS

The recommendations in this section pertain only to social scientists who have not had satisfactory mathematical training as undergraduates. (Those who have had the undergraduate work outlined above will not need the courses indicated here.)

Some graduate students in social science or mature social scientists may find that their needs for mathematical training will be met by interdepartmental courses, or courses given by social science departments, which are recommended in the preceding section.

A full-year course in mathematics for graduate students of social science should combine the two undergraduate courses described above into a single special course meeting 3 hours weekly. Some graduate credit should be given for the course.

From time to time, universities or other appropriate organizations should again offer summer institutes for intensive training in mathematics for social scientists, similar to the institutes sponsored by the Social Science Research Council in 1953 and 1955.

CONSULTATION

At present, consultation between social scientists and mathematicians or mathematical statisticians is often difficult, partly because of lack of interest on the part of the mathematicians, and partly because of the social scientists' lack of knowledge as to when and how mathematics is applicable. The program of mathematical training outlined above, if developed and maintained for several years, will greatly improve both communication and understanding.

Social scientists should make an effort to train some mathematicians in social sciences or at least in applications of mathematics to the social sciences, 28 recommended above with reference to integration of mathematical and social science training. Until more mathematicians and mathematical statisticians minor in social sciences, as they now often do in physics, their communication with social scientists will continue to be handicapped. At present relatively few social science courses are planned to interest mathematicians or to use their special training.

In addition to the courses recommended to facilitate integration, social scientists might consider offering courses or seminars designed for persons not trained in social science but having certain mathematical training.

Finally, social scientists will get better advice from mathematicians who participate than from those who are merely consulted. The most difficult question is often that of the mathematical formulation of social science problems. The social scientist should avoid both limiting the mathematician and having the mathematician limit him.

INTERUNIVERSITY SUMMER RESEARCH SEMINARS, 1955

FOUR interuniversity summer research seminars will be held in 1955, under the program reinstituted by the Council in 1954 with support provided by the Rockefeller Foundation.

One of the prospective seminars, on the study of presidential nominating politics, will be jointly sponsored by the Council and The Brookings Institution, and will meet at the latter from June 20 to August 12, as reported in the March issue of *Items*, page 10. Paul T. David, Senior Staff Member of The Brookings Institution, will serve as chairman of the seminar. The other full-time participants will be Franklin M. Bridge, Associate Professor of Government, University of Arkansas; Harry R. Davis, Assistant Professor of

Government, Beloit College; Warren E. Miller, Assistant Professor of Political Science, University of California, Berkeley; Lester G. Seligman, Assistant Professor of Political Science and Sociology, University of Oregon; Allan P. Sindler, Instructor in Political Science, Duke University; Stanley Kelley, Jr., and John H. Romani, Research Fellows of The Brookings Institution. In addition, several consultants will participate for varying periods of time. This seminar is of particular interest to the Council's Committee on Political Behavior, which contributed to development of the plans. The seminar will analyze materials resulting from the Brookings study, *Presidential Nominating Politics in 1952*, which was made in cooperation with

the American Political Science Association, and will attempt to formulate better hypotheses for the guidance of research on the presidential nominating process.

A seminar on comparative study of political leadership, planned by the Council's Committee on Comparative Politics, will meet at Princeton University from June 20 to July 29 under the chairmanship of Lucian W. Pye, Research Associate at the Princeton Center of International Studies. The other participants will be Harry J. Benda, Assistant Professor of History, University of Rochester; Douglas S. Paauw, Lecturer on Economics and Regional Studies, Harvard University, and Research Associate, Center for International Studies, Massachusetts Institute of Technology; Fred W. Riggs, Public Administration Clearing House, New York; I. Milton Sacks, graduate student in political science, Yale University; Paul W. van der Veur, Instructor in Political Science, and Co-Director of Project on Indonesia, Southeast Asia Studies, Yale University; Robert Van Niel, Instructor in History, Russell Sage College; R. Richard Wohl, Associate Professor, Division of the Social Sciences, University of Chicago. This seminar will be especially concerned with research on the political role of Westernized leaders in Southeast Asia, and each of the participants is a specialist on a country in that region.

A seminar on research on cognition and perception of persons will be held at Harvard University from about June 15 to August 15, under the chairmanship of Renato Tagiuri, Lecturer and Research Associate in the Harvard Department of Social Relations. Also in attendance will be Solomon E. Asch, Professor of Psychology,

Swarthmore College; Nathan L. Gage, Associate Professor of Education, University of Illinois; William L. Hays, Instructor in Psychology, University of Michigan; Fritz Heider, Professor of Psychology, University of Kansas; William F. Soskin, Assistant Professor of Psychology, University of Chicago. The broad purpose of this seminar will be to align theoretical formulations and recent methodological advances and empirical findings in this specific field, and to indicate what research might well next be undertaken.

A seminar on research on human motivation will meet at the University of Connecticut from June 27 to August 19. The members, who include both experimental and clinical psychologists, will be Howard Brand, Assistant Professor of Psychology, University of Connecticut, chairman; Orville G. Brim, Jr., Assistant Professor of Sociology, University of Wisconsin; Russel Clark, Assistant Professor of Psychology, University of Michigan; Joseph J. Greenbaum, Assistant Professor of Psychology, Wesleyan University; Kay C. Montgomery, Assistant Professor of Psychology, Yale University; William A. Wilson, Jr., Research Associate, Neurophysiology Laboratory, Institute of Living, Hartford, Conn.

Under the present program, the Council will be able to support about five interuniversity research seminars in the summer of 1956. Proposals for such seminars will be welcomed and should be sent to the New York office of the Council in at least preliminary form as early as possible, for review by the Committee on Problems and Policy in the fall of 1955. The seminar program was described in detail in the March 1954 issue of *Items*, pages 4–6.

COMMITTEE BRIEFS

LINGUISTICS AND PSYCHOLOGY

John B. Carroll (chairman), James J. Jenkins, Alvin M. Liberman, Floyd G. Lounsbury, Charles E. Osgood, Thomas A. Sebeok, Rulon S. Wells, 3rd; staff, Joseph B. Casagrande.

The Southwest Project in Comparative Psycholinguistics, a two-year study of the differential influences of various languages on the psychological processes of their speakers, will be launched this summer in the American Southwest, under the auspices of the committee. The Council has received a grant of \$75,000 from the Carnegie Corporation of New York for support of the project. Comparable experimental observations are to be made among several Indian and white groups of the effects of differing linguistic codes on cognitive functions such as perception, recall, and problem solving, on the ease of communication about standard sets of concrete events, on the structure of semantic factors, on verbal association, and related problems.

As outlined, the project is divided into two phases: (1) research training and planning, culminating in a seminar or workshop to be held at the University of New Mexico, Albuquerque, during July and August 1955; and (2) field research and analysis of data, beginning early in the summer of 1956. The interim academic year will be devoted to further training of the research staff, to pilot studies, and to perfecting the design of the research.

John B. Carroll has been named general director of the project. Stanley S. Newman, Professor of Anthropology, University of New Mexico, and Edward P. Dozier, Instructor in Anthropology, Northwestern University, will serve as instructional staff for the 1955 summer training seminar. Research associates for the project are: Jarvis R. Bastian, graduate student in psychology, University of Minnesota; Susan M. Ervin, graduate student in social psychology, University of Michigan; Arnold E. Horowitz, graduate student in psychology, Harvard University; James Q. Knowlton,

graduate student in psychology, University of California, Los Angeles; Herbert J. Landar, graduate student in linguistics, Yale University; Lois Lawrence, graduate student in psychology, Cornell University; Eric H. Lenneberg, graduate student in psychology and linguistics, Harvard University, and Research Associate, Center for International Studies, Massachusetts Institute of Technology; Howard S. Maclay, Instructor in Anthropology, University of Oklahoma; Sol Saporta, graduate student in Spanish linguistics, University of Illinois; Donald F. Solá, graduate student in linguistics, Cornell University; Charles M. Solley, postdoctoral fellow in psychology, University of Illinois; George J. Suci, Research Assistant Professor, Institute of Communications Research, University of Illinois; and Mary F. Woodward, graduate student in linguistics, University of California, Los Angeles. Sally S. Bastian, graduate student in psychology, University of Minnesota, will serve as secretary for the project.

As part of a continuing effort to bring together small groups of persons for intensive two- or three-day discussions of delimited substantive, methodological, or theoretical problems, two additional work conferences have recently been sponsored by the committee. The first, on techniques of content analysis, was held on February 9–11 at Allerton House, Monticello, Illinois, under the chairmanship of Charles E. Osgood. The second, on associative processes in verbal behavior, was held on April 25–26 at the University of Minnesota and was chaired by James J. Jenkins.

The conference on content analysis emphasized the development of new techniques, drawing on the joint resources of structural linguistics and psychology, and on a critical discussion of existing techniques by social scientists who employ content analysis in their own research. Participants in the conference, in addition to the chairman and Thomas A. Sebeok from the committee, included Robert P. Armstrong, Human Relations Area Files, Yale University; John A. Garraty, Michigan State College; Alexander George, Rand Corporation; George F. Mahl, Yale University; Ithiel de Sola Pool, Center for International Studies, Massa-

chusetts Institute of Technology. Members of the faculty of the University of Illinois and of its Institute of Communications Research also participated in the discussions.

New developments in word association studies, which in scientific psychology date from the first published study by Francis Galton, were considered at the second conference. Special attention was given to the utility of word association techniques for investigating general problems of language behavior and for related research on learning, perception, and recall. Participants in the conference, in addition to members and staff of the committee, were Weston A. Bousfield, University of Connecticut; Charles N. Cofer, University of Maryland; Davis Howes, Operational Applications Laboratory, Bolling Air Force Base; Leo J. Postman, University of California, Berkeley; Wallace A. Russell, University of Minnesota; and Sol Saporta, University of Illinois.

POLITICAL BEHAVIOR

David B. Truman (chairman), Conrad M. Arensberg, Angus Campbell, Oliver Garceau, Alexander Heard, V. O. Key, Avery Leiserson, M. Brewster Smith.

The response to the committee's memorandum on comparative research on state politics, circulated late in 1954 among political scientists believed to share the committee's concern with such research, gave evidence of widespread interest in a comparative approach to research in this area. A number of political scientists with plans for research along this line were identified; and on the basis of the proposals received for research within the general framework outlined in the memorandum, the committee formulated plans for a research program under its auspices, for which funds were sought by the Council. In April the Carnegie Corporation of New York granted \$150,000 to the Council for a three-year program of research on state politics. As a first step, the committee in June will discuss further plans with some 12 political scientists who contributed statements on needed research.

PERSONNEL

FACULTY RESEARCH FELLOWSHIPS

The Committee on Faculty Research Fellowships—Blair Stewart (chairman), Paul W. Gates, Harold E. Jones, Lyle H. Lanier, Emmette S. Redford, John W. Riley, Jr., and Malcolm M. Willey—at its meeting on March 24 recommended 8 appointments for three-year terms, as listed below:

May Brodbeck, Associate Professor of Philosophy, University of Minnesota, for research on concept and theory construction in social science, and on theory of communication.

Robert E. Lane, Assistant Professor of Political Science, Yale University, for research on voting behavior.

James R. Major, Assistant Professor of History, Emory University, for research on the French Estates General. Melford E. Spiro, Assistant Professor of Anthropology, University of Connecticut, for research on culture patterns, self-conceptions, and world views, with special reference to utopian communities and sects.

Peter O. Steiner, Assistant Professor of Economics, University of California, Berkeley, for research on regulated industries and public policy.

Joseph Tanenhaus, Assistant Professor of Government, New York University, for quantitative studies of judicial behavior.

Jackson Toby, Assistant Professor of Sociology, Rutgers University, for research on role conflict and delinquency.

Frank R. Westie, Assistant Professor of Sociology, Indiana University, for research on social status in majority and minority groups.

RESEARCH TRAINING FELLOWSHIPS

The Committee on Social Science Personnel—Earl Latham (chairman), Harry Alpert, Ralph L. Beals, Richard B. Heflebower, John H. Rohrer, and Paul Webbink—at its meeting on March 21–22 voted to award 36 research training fellowships, comprising 27 predoctoral and 9 post-doctoral appointments. In addition, 4 alternates were named. The list of appointees and alternates follows:

- Loren Baritz, Ph.D. candidate in history, University of Wisconsin, for further training in industrial psychology and sociology, in preparation for research on social science and American industry, 1880–1950.
- Jarvis R. Bastian, Ph.D. candidate in psychology, University of Minnesota, for training in linguistics and research in psycholinguistics.
- Abraham H. Black, Ph.D. candidate in social psychology, Harvard University, for research on secondary reinforcement and the study of mathematical approaches to learning.
- Allan G. Bogue, Ph.D., Cornell University, Assistant Professor of History, State University of Iowa, for training in rural sociology and statistics.
- George F. Break, Ph.D., University of California, Assistant Professor of Economics, University of California, Berkeley, for research in England on incentives to work under changing income and tax rates.
- Andrew F. Brimmer, Ph.D. candidate in economics, Harvard University, for research on monetary policy and investments of insurance companies (Alternate).
- Carlfred B. Broderick, Ph.D. candidate in child development and family relations, Cornell University, for research on the internal role structure of informal social groups (Alternate).
- Fred G. Burke, Ph.D. candidate in politics, Princeton University, for field training in the United States or England in local government institutions and further training in relevant social science methods.
- Daniel H. Calhoun, Ph.D. candidate in history, Johns Hopkins University, for study of sociology and research on the social role of the civil engineer in the United States. 1790–1867.
- Bernard P. Cohen, Ph.D. candidate in sociology, Harvard University, for training in the application of mathematics in research on small groups.
- Ronald Cohen, Ph.D. candidate in anthropology, University of Wisconsin, for research in northern Nigeria on changing economic patterns.
- Warren L. D'Azevedo, Ph.D. candidate in anthropology, Northwestern University, for research in northwest Liberia on problems of differential acculturation among the Gola peoples.
- Anthony Downs, Ph.D. candidate in economics, Stanford University, for research on the economic effects of superhighways and their financing.
- Richard M. Emerson, Ph.D. candidate in sociology, University of Minnesota, postdoctoral fellowship for training in the application of logic and mathematics in research on small groups (Alternate).
- Glenn V. Fuguitt, Ph.D. candidate in sociology, University of Wisconsin, for training in applied statistics.
- John V. Grauman, Ph.D. candidate in demography, London School of Economics, and Social Affairs Officer,

- Population Division, United Nations, for training in France in demography and for demographic research on certain nonindustrial areas in Europe.
- H. Zvi Griliches, Ph.D. candidate in economics, University of Chicago, for study of the development, distribution, and acceptance of a new technology.
- Richard C. Kao, Ph.D. in agricultural economics, University of Illinois, Research Assistant, Department of Psychology, University of Michigan, for training in mathematics and for research on decision processes.
- David T. Kleinman, Ph.D. in industrial management, Ohio State University, for training for research on organizational behavior.
- Adolf G. Korman, Ph.D. candidate in history, University of Wisconsin, for research on the role of industry in the acculturation of immigrants.
- Frederic K. Lehman, Ph.D. candidate in anthropology, Columbia University, postdoctoral fellowship for research in India on the relationship of caste subcultures to village, regional, and national culture.
- Eric H. Lenneberg, Ph.D. candidate in psychology and linguistics, Harvard University, for training in psychology and research on the psychology of language.
- Howard S. Maclay, Ph.D. candidate in anthropology, University of New Mexico, postdoctoral fellowship for training in statistics and psychology and research on relationships between language and other behavior.
- James B. MacQueen, Ph.D. candidate in psychology, University of Oregon, for training in the application of mathematics in social science research.
- Donald R. Matthews, Ph.D., Princeton University, Assistant Professor of Government, Smith College, for research on the social backgrounds, political careers, and voting behavior of United States Senators.
- Allan H. Meltzer, Ph.D. candidate in economics, University of California, Los Angeles, for research in France on inflation, 1939–54.
- René F. Millon, Ph.D. candidate in anthropology, Columbia University, postdoctoral fellowship for training in Mexico in the interpretation of Nahuatl and early Spanish sources, preparatory to research on preconquest Mesoamerican society (Alternate).
- Paul H. Mussen, Ph.D., Yale University, Associate Professor of Psychology, Ohio State University, for study of child development and anthropology.
- Richard F. Muth, Ph.D. candidate in economics, University of Chicago, for research on investment in residential construction.
- Richard R. Nelson, Ph.D. candidate in economics, Yale University, postdoctoral fellowship for study of engineering in relation to economic development.
- Peter Kong-ming New, Ph.D. candidate in sociology, University of Missouri, for research on osteopathic students' perceptions of osteopathy as a vocation.
- Henry B. Nicholson, Ph.D. candidate in anthropology, Harvard University, for ethno-historical research in Mexico on an aboriginal cult.
- Hugh D. Price, Ph.D. candidate in political science, Harvard University, for research on Congressional coalitions during the New Deal period.
- Gustav Ranis, Ph.D. candidate in economics, Yale University, for research in Japan on capital accumulation.

Maynard W. Shelly, II, Ph.D. candidate in psychology, University of Wisconsin, for research on sequences of responses in group situations.

Neil J. Smelser, Ph.D. candidate in social relations, Harvard University, for research on sociological conditions of economic growth in nineteenth century England.

Donald E. Stokes, Ph.D. candidate in political science, Yale University, for training in social psychology and

survey research methods.

W. Paul Strassmann, Ph.D. candidate in economics, University of Maryland, for research on risk and technological innovation in the manufacture of producer's goods, 1820–85.

Marc J. Swartz, Ph.D. candidate in social anthropology, Harvard University, for research in Truk on some psychological functions of the kinship system under the

influence of acculturation.

Charles H. Tilly, Ph.D. candidate in sociology, Harvard University, for research in France on the social background of the Vendean insurrection.

FIRST-YEAR GRADUATE STUDY FELLOWSHIPS

The Committee on Undergraduate Research Training—E. Adamson Hoebel (chairman), R. F. Arragon, Robert B. MacLeod, Wilbert J. McKeachie, Albert J. Reiss, Jr., and Everett K. Wilson—has voted to award first-year graduate study fellowships for 1955–56 to 20 of the 45 college seniors who received undergraduate research stipends in 1954. The recipients of these stipends performed original research in the social sciences under faculty guidance during the summer between their junior and senior years, and have continued work on their projects during the senior year.

A few of the students have also been appointed as Woodrow Wilson Fellows, and their support is shared by the

two programs.

The students selected by the committee, their undergraduate colleges, major fields of study, and the graduate schools they will attend (if known) are listed below:

Clifford H. Block, University of Rochester; psychology; Yale University.

Stephen E. DeForest, Yale University; political science.
Peter B. Field, Yale University; psychology; Harvard University.

W. Eric Gustafson, Williams College; economics; Harvard University.

Forbes B. Hays, Vanderbilt University; political science; Columbia University.

Norman Hoffman, Cornell University; sociology; Harvard University.

Michael M. Horowitz, Oberlin College; anthropology; Columbia University.

Kamal Hossain, University of Notre Dame; political science.

Dale W. Jorgenson, Reed College; economics; Harvard University.

Igor Kopytoff, Northwestern University; anthropology; University of Pennsylvania.

Margaret M. Kruse, Trinity College, Washington, D. C.; history.

Beatrice B. Lauter, Indiana University; history; Yale University.

Charlotte Lubin, Temple University; sociology; Columbia University.

Roger D. Masters, Harvard University; political science; University of Chicago.

L. Elizabeth Reilly, University of Toronto; psychology. Jane K. Reynolds, Middlebury College; psychology; University of Michigan.

H. Laurence Ross, Swarthmore College; psychology;

Harvard University.

Marjorie J. Schaefer, University of Minnesota; psychology; Radcliffe College.

Bernard E. Segal, Dartmouth College; sociology; Harvard University.

Herman Stekler, Clark University; economics; Massachusetts Institute of Technology.

UNDERGRADUATE RESEARCH STIPENDS

At its meeting on March 14-15, the Committee on Undergraduate Research Training, whose members are named above, voted to award 40 undergraduate research stipends for the summer of 1955 (additional awards are to be made late in May):

Vladimer Almendinger; supervisor, David T. Cattell, Assistant Professor of Political Science, University of California, Los Angeles; Soviet youth and religion.

Michael M. Ames; supervisor, Cyril S. Belshaw, Assistant Professor of Anthropology, University of British Columbia; a study of land rights and business enterprises in the Fountain and Pavilion Indian Reserves.

Jeremy R. Azrael; supervisor, Merle Fainsod, Professor of Government, Harvard University; the nature of bu-

reaucracy in a totalitarian state.

James C. Beck; supervisor, Roger W. Brown, Assistant Professor of Social Relations, Harvard University; some further consideration of word association norms.

Paul Blumberg; supervisor, Richard T. Morris, Assistant Professor of Sociology, University of California, Los Angeles; the relations between social position and political and religious values.

Ana M. Basso Bruno; supervisor, Arthur J. Vidich, Faculty of Social Science, University of Puerto Rico; a study of spiritualism in Puerto Rican society.

Thomas K. Burch; supervisors, William J. Gibbons, S.J., Instructor in History and Social Sciences, and Harry W. Kirwin, Professor of History, Loyola College, Baltimore; an examination of the old-age working force and employment available to the aged in Baltimore.

Douglas Candland; supervisor, Joel Greenspoon, Assistant Professor of Psychology, Pomona College; experimentation on the extinction and spontaneous recovery of a

conditioned response.

J. Robert Cohler, Jr.; supervisor, Elton B. McNeil, Assistant Professor of Psychology, University of Michigan; effect of personal needs on perception and behavior.

Albert E. Cowdrey; supervisor, Charles P. Roland, Assistant Professor of History, Tulane University; a study of methods and personalities in the 1932 senatorial contest in Louisiana.

William L. Earl; supervisor, Arthur R. M. Lower, Professor of History, Queen's University, Canada; the North American colonies in the writings of British travelers and immigrants, 1783–1850.

Raymond Favreau; supervisors, William A. Westley, Associate Professor of Sociology, and Frederick Elkin,

Assistant Professor of Sociology, McGill University; face-to-face persuasion between salesmen and clients.

Edward Feigenbaum; supervisors, Herbert A. Simon, Professor of Industrial Management, and James G. March, Senior Research Fellow, Carnegie Institute of Technology; an experimental study of influence in a problem-solving situation.

Barbara Feldman; supervisor, Joseph Adelson, Faculty of Social Science, Bennington College; personality dif-

ferences in behavior in small groups.

Harry Fowler, Jr.; supervisor, Eugene H. Galanter, Instructor in Psychology, University of Pennsylvania; the effect of effort on momentary response probabilities in a 3-choice situation.

William Friedland; supervisor, Harold L. Sheppard, Assistant Professor of Sociology, Wayne University; attitude and stereotype changes in a bi-racial group of trade unionists.

Alice E. Goldsmith; supervisor, Theodore M. Newcomb, Professor of Sociology and Psychology, University of Michigan; a study of outgroup references.

Van Beck Hall; supervisor, Thomas LeDuc, Professor of History, Oberlin College; further light on the origins of the War of 1812.

James W. Harbison, Jr.; supervisor, William B. Hamilton, Professor of History, Duke University; seditious libel in England and America in the late eighteenth and early nineteenth centuries.

Karl G. Heider; supervisors, Gordon R. Willey, Professor of Archaeology and Ethnology, Harvard University, and William H. Kelly, Director, Bureau of Ethnic Research, University of Arizona; an ethnographic study of the Fort McDowell community.

Marilyn L. Johnson; supervisor, E. H. Rhyne, Instructor in Sociology and Anthropology, College of William and Mary; attitudes and friendship patterns among women

in a housing development.

Warren K. Kaplan; supervisor, George Mandler, Assistant Professor of Social Relations, Harvard University; individual differences in response to persuasion and rein-

Cynthia Cone Kelsey; supervisor, Elden Johnson, Instructor in Anthropology, University of Minnesota; the role of discipline in eastern Dakota child-training practices.

Peter B. Lenrow; supervisors, Paul N. Ylvisaker, Associate Professor of Political Science, and Murray S. Stedman, Jr., Professor of Political Science, Swarthmore College, and H. H. Giles, Director, Center for Human Relations Studies, New York University; a study of the nature and significance of personal values in administrative treatment of juvenile offenders.

Norma M. Matarese; supervisor, Sister Joan, Chairman, Department of History, Trinity College, Washington, D. C.; the attitudes of Italian Americans in Rhode Island concerning United States foreign policy toward western Europe, 1945–50.

Jerry Medow; supervisors, Robert Runo, Associate Professor of Political Science, and George H. Watson, Professor of Political Science, Roosevelt University; a study of voting behavior and community power structure in the 49th ward of Chicago.

Judith M. Michaelson; supervisor, Richard O. Cummings, Assistant Professor of History, Brooklyn College; publicity methods of the Fight for Freedom Committee and other organizations in New York City in 1941.

Pershing Parker; supervisor, Charles W. Akers, Associate Professor of History, Eastern Nazarene College; the political ecology of prerevolutionary Boston, 1720-76.

Eugene B. Parsons; supervisor, Donald W. Fiske, Associate Professor of Psychology, University of Chicago; response variability as a function of availability.

Bernard Portis; supervisor, Peter H. Rossi, Assistant Professor of Social Relations, Harvard University; the influence of primary groups on religious behavior.

Joann Shirley Pym; supervisors, Arthur E. Gravatt, Instructor in Sociology, Willamette University, and Kay Laughridge, Director, Social Service Program, The Children's Orthopedic Hospital, Seattle; behavior of children aged 3-6 years during hospitalization.

Carolyn M. Rice; supervisor, Dwight W. Chapman, Professor of Psychology, Vassar College; the application of social attitude scaling techniques to esthetic stimuli.

Shirley Rubin; supervisors, Sol Tax, Professor of Anthropology, and Norman A. McQuown, Associate Professor of Anthropology, University of Chicago; research on Mesquakie Fox Indian language and thought patterns.

Lenore Sawyer; supervisor, Wallace A. Russell, Assistant Professor of Psychology, University of Minnesota; the influence of word association on generalization.

Harry A. Scarr; supervisor, Theodore M. Newcomb, Professor of Sociology and Psychology, University of Michigan; the development of and relations among subgroups in a controlled "natural" setting.

Peter Schneider; supervisor, Heinz Eulau, Associate Professor of Political Science, Antioch College; reasons for

not voting.

Steven J. Schneider; supervisor, John K. Fairbank, Professor of History, Harvard University; a comparative history of two groups of entrepreneurs in China, 1900-1927.

Barbara J. Schumann; supervisor, Mark H. Curtis, Assistant Professor of History, University of California, Los Angeles; relationship of Puritanism to the rise of the scientific spirit in seventeenth century England.

Philip Stone, III; supervisor, Joseph Kamiya, Instructor in Psychology, University of Chicago; some causes and effects of errors made by discussion group members in

estimating their own group consensus.

Robert F. Terwilliger; supervisor, Irving L. Janis, Associate Professor of Psychology, Yale University; resistance to attitude change as a function of the strength of fear-arousing appeals in persuasive communications.

POLITICAL THEORY AND LEGAL PHILOSOPHY FELLOWSHIPS

The Committee on Political Theory and Legal Philosophy Fellowships-J. Roland Pennock (chairman), Herbert A. Deane, David Easton, Norman Jacobson, Robert G. McCloskey, and Frederick Watkins-at its meeting on March 31 awarded 5 fellowships and one travel grant:

Jerome E. Carlin, Ph.D. candidate in sociology, University of Chicago, for research in Germany on German sociolegal thought in the nineteenth century.

Martin Fleisher, Ph.D. candidate in public law and government, Columbia University, for research on the social and political theory of James Harrington.

Martin P. Golding, Ph.D. candidate in philosophy, Columbia University, for research in the United States on Israeli legal philosophy and its bearing on the "church-state" problem in the Near East.

Jiri Liska, Ph.D. in government, Harvard University, for development of an equilibrium theory of international politics and the organization of collective security.

George K. Romoser, Ph.D. candidate in political science, University of Chicago, for research on existentialist philosophy and its implications for political science.

A travel grant was awarded to:

Mary Peter Mack, Ph.D. candidate in public law and government, Columbia University, for research in England on the political philosophy of Jeremy Bentham.

GRANTS-IN-AID

The Committee on Grants-in-Aid-George W. Stocking (chairman), M. Margaret Ball, Richard S. Crutchfield, Robert E. L. Faris, and Edward C. Kirkland-at its meeting on March 28-29 voted to award 39 grants, and named 4 scholars as alternates to receive grants if some of the prior awards are declined. The appointees and alternates are:

Kenneth K. Bailey, Assistant Professor of History, New Mexico Military Institute, for study of the significance of religious fundamentalism in the South.

Violet Barbour, Professor Emeritus of History, Vassar College, for research in England on the influence of merchants on English commercial policies, 1660-96.

Richard Bardolph, Associate Professor of History, Woman's College of the University of North Carolina, for study of the organization and administration of North Carolina troops in the Civil War.

James L. Bates, Assistant Professor of History, University of Illinois, for research on naval petroleum reserves and United States conservation policy, 1909-30.

Wendell Bell, Associate Professor of Sociology, Northwestern University, for research on social participation and social isolation in San Francisco (Alternate).

Morroe Berger, Assistant Professor of Sociology, Princeton University, for research in the United States on

the higher civil service in Egypt.

D. Mackenzie Brown, Professor of Political Science, University of California, Santa Barbara, for research in the United States on the conflict between traditional political thought in India and Western political ideas since 1800.

Gwendolen M. Carter, Professor of Government, Smith College, for research in the United States on the South African party system and its effect on race relations.

George A. Codding, Jr., Lecturer in Political Science, University of Pennsylvania, for research in France on the current position of the French Socialist Party.

Helen Codere, Assistant Professor of Anthropology, Vassar College, and Visiting Lecturer in Anthropology, University of British Columbia, for ethnological research in British Columbia on the Kwakiutl Indians.

Rushton Coulborn, Professor of History, Atlanta University, for research on the comparative cultural history of ancient civilizations.

Walter H. Crockett, Assistant Professor of Psychology, Kansas State College, for research on personal determinants of interpersonal perception.

Dorothy Dinnerstein, Research Associate, Bank Street College, New York City, for research on personality

concomitants of independence and conformity under experimental group pressure (Alternate).

David L. Dowd, Associate Professor of History, University of Florida, for research in France on the roles of artists during the French Revolution.

Philip Garigue, Assistant Professor in Anthropology, McGill University, for study of the kinship and family system of French Canadians.

Charles H. George, Assistant Professor of History, and Catherine George, Lecturer in History, University of Rochester, for research in England on social theories of English preachers, 1603-40 (Alternate).

Norman A. Graebner, Associate Professor of History, Iowa State College, for research on political and economic conditions during James K. Polk's presidency.

Charles M. Haar, Assistant Professor, Harvard Law School, for research in England on the British land-use

Ernst B. Haas, Assistant Professor of Political Science, University of California, Berkeley, for research in Europe on the integrative effects of the Schuman Plan with respect to political parties and interest groups.

William H. Ittelson, Assistant Professor of Psychology, Princeton University, for research on visual space

perception.

Charles Jelavich, Assistant Professor of History, University of California, Berkeley, for research in the United States on Jugoslav nationalism.

David S. Landes, Assistant Professor of Economics, Columbia University, for research in Europe on technological change in the industrial revolution, 1750-1914.

Gerhard E. Lenski, Assistant Professor of Sociology, University of Michigan, for research on recent membership trends in the Roman Catholic Church in the United States.

Eugene M. Lerner, Assistant Professor of Economics, University of Idaho, for comparative study of money, prices, and wages in the South and the North, 1865-80.

Ilse Lichtenstadter, Lecturer, Public Affairs Institute, New York University, for research in Pakistan on the position of women in contemporary Muslim society.

Alfred R. Lindesmith, Professor of Sociology, Indiana University, for study in Great Britain of the British system of narcotics control.

Arthur J. Marder, Professor of History, University of Hawaii, for research on British sea power as reflected in the letters of Admiral Lord Fisher (Alternate).

Walter T. Martin, Associate Professor of Sociology, University of Oregon, for analysis of the growth of hinterland cities.

David P. McAllester, Associate Professor of Anthropology, Wesleyan University, for research on religious and esthetic values in Navaho and Apache Indian music.

Francis E. Merrill, Professor of Sociology, Dartmouth College, for research in France on courtship and marital choice in middle-class families.

David H. Pinkney, Associate Professor of History, University of Missouri, for research in France on the growth and reconstruction of Paris during the Second Empire.

John B. Rae, Associate Professor of History, Massachusetts Institute of Technology, for research on the role of engineers as business leaders in American industry.

Walter C. Richardson, Professor of History, Louisiana State University, for research in England on the history of the Court of Augmentations.

Charles R. Ritcheson, Associate Professor of History, Kenyon College, for research in the United States and England on the quest for an Anglo-American rapprochement, 1781–95.

Howard Robinson, Emeritus Professor of History, Oberlin College, for research in New Zealand on British

overseas postal communications.

A. William Salomone, Associate Professor of History, New York University, for research in Italy on Italian social, economic, and cultural history.

David M. Schneider, Assistant Professor of Social Anthropology, Harvard University, for research on the

Mescalero Apache kinship system.

Arthur Schweitzer, Professor of Economics, Indiana University, for research in Germany on relations between big business and the Nazi Party.

John L. Snell, Assistant Professor of History, Tulane University, for research in the United States on the origins

of the first German republic.

Marvin B. Sussman, Assistant Professor of Sociology, Union College, and Visiting Assistant Professor of Sociology, University of Chicago, for research on the relations of young married couples with their parents and parents-in-law.

Robert Walcott, Jr., Professor of History, College of Wooster, for research in the United States on the London merchant class in the seventeenth century.

Paul Wallin, Professor of Sociology, Stanford University, for research on sexual behavior of married couples.

Edward F. Willis, Professor of History and Government, Jersey City Junior College, for research on Herbert Hoover and the relief of Germany, 1918-19.

1955 SUMMER INSTITUTES IN MATHEMATICS

Selection of applicants for admission to the Summer Institutes in Mathematics for Social Scientists, which are to be held at the University of Michigan, June 20 to August 12, and at Stanford University, June 27 to August 19, was made by a subcommittee of the Committee on Mathematical Training of Social Scientists, consisting of Edward P. Hutchinson (chairman), Robert R. Bush, Gerard Debreu, William G. Madow, Frederick Mosteller, and Robert M. Thrall. The following students have been admitted to the respective institutes:

University of Michigan

Robert C. Birney, Instructor in Psychology, Amherst College.

Mark Blaug, Instructor in Economics, Yale University. Theodore T. Curtis, graduate student in psychology, University of Michigan.

Clinton B. DeSoto, graduate student in psychology, University of Wisconsin.

C. E. Ferguson, graduate student in economics, University of North Carolina.

Harold B. Gerard, Assistant Professor of Psychology, University of Buffalo.

Robert L. Hall, Research Psychologist, MacDill Air Force Base, Florida.

A. Paul Hare, Research Fellow, Harvard School of Public Health.

Victor K. Heyman, graduate student in political science, University of Illinois.

Daniel M. Holland, member of research staff in economics, National Bureau of Economic Research.

Robert L. Isaacson, graduate student in psychology, University of Michigan.

Gene G. Kassebaum, graduate student in sociology, Harvard University.

Herbert Kaufman, Assistant Professor of Political Science, Yale University.

Shohei Kawakatsu, graduate student in agricultural economics, University of Wisconsin.

Michael E. Levy, graduate student in economics, Columbia University.

Michael C. Lovell, graduate student in economics, Stanford University.

Richard Mattessich, Associate Professor of Commerce and Economics, Mount Allison University.

Ian McDonald, graduate student in economics, Duke University.

William J. McGuire, Social Science Research Council postdoctoral fellow in psychology, University of Minnesota.

Albert G. Mossawir, graduate student in economics, University of Michigan.

Thomas Natsoulas, graduate student in psychology, University of Michigan.

William A. Niskanen, Jr., graduate student in economics, University of Chicago.

Earle W. Orr, Jr., Instructor in Economics, Purdue University.

Algimantas M. Petrenas, graduate student in economics, Columbia University.

L. Elizabeth Reilly, senior student in psychology, University of Toronto.

Richard N. Rosett, graduate student in economics, Yale University.

Julian C. Stanley, Jr., Associate Professor of Education, University of Wisconsin.

Theodor D. Sterling, Instructor in Mathematics, University of Alabama.

Donald W. Stilson, graduate student in psychology, University of Illinois.

Harry S. Upshaw, Acting Assistant Professor of Psychology, University of Alabama.
Richard S. Weckstein, Assistant Professor of Economics,

University of Buffalo.

Constantine A. Yeracaris, Assistant Professor of Sociology, University of Buffalo.

Stanford University

David A. Baerncopf, graduate student in economics, Stanford University.

Paul Bakan, Instructor in Psychology, Michigan State College.

Robert L. Bard, graduate student in economics, University of Michigan.

John B. Bazley, senior student in economics, San Francisco State College.

Abraham H. Black, graduate student in psychology, Harvard University.

Jack Block, research psychologist, University of California, Berkeley.

Lester Blum, Associate Professor of Economics, Colgate University.

Bernard P. Cohen, graduate student in sociology, Harvard University.

Tibor Fabian, graduate student in economics, University of California, Los Angeles.

John W. Hooper, graduate student in economics, Stanford University.

David B. Houston, Instructor in Insurance, University of Pennsylvania.

Charles W. Howe, graduate student in economics, Stanford University.

James C. Ingram, Assistant Professor of Economics, University of North Carolina.

Nehemiah Jordan, Research Psychologist, National Institute of Mental Health.

Melvin L. Kohn, Research Sociologist, National Institute of Mental Health.

William S. Laughlin, Associate Professor of Anthropology, University of Oregon.

Duane F. Marble, graduate student in geography, University of Washington.

Robert McGinnis, Assistant Professor of Sociology, Florida State University.

Norman McKown, graduate student in sociology, Stanford University.

Reuben Mehling, graduate student in communications, Stanford University.

G. A. Milton, graduate student in psychology, Stanford University.

Marvin P. Miracle, graduate student in economics, Stanford University.

Joseph D. Phillips, Professor of Business and Economics, Idaho State College.

Gustav Ranis, graduate student in economics, Yale University.

Leonard S. Rubin, Research Psychophysiologist, Army Chemical Center, Maryland.

William C. Schutz, Lecturer in Social Psychology, Harvard University.

David Shapiro, Lecturer in Social Psychology, Harvard University.

Donald E. Stokes, graduate student in political science, Yale University.

Paul Wells, graduate student in economics, Stanford University.

John D. Werntz, Instructor in Psychology, Swarthmore College.

Benjamin W. White, Research Scientist (psychology), Fort Ord, California.

Marvin E. Wolfgang, Instructor in Sociology, University of Pennsylvania.

Dorothy R. Wynne, Lecturer in Economics, Barnard College.

PUBLICATIONS

COUNCIL SERIES

The Business Enterprise as a Subject for Research, Pamphlet 11, by Howard R. Bowen. Sponsored by the Committee on Business Enterprise Research. May 1955. 111 pp. \$1.25.

The Social Sciences in Historical Study: A Report of the Committee on Historiography, Bulletin 64. July 1954. 191 pp. Paper, \$1.75; cloth, \$2.25.

Research on Labor Mobility: An Appraisal of Research Findings in the United States, Bulletin 65, by Herbert S. Parnes. October 1954. 216 pp. \$1.75.

Labor Mobility in Six Cities, prepared by Gladys L. Palmer, with the assistance of Carol P. Brainerd, for the Committee on Labor Market Research. June 1954. 191 pp. Paper, \$2.25; cloth, \$2.75.

The Council's bulletins, monographs, and pamphlets are distributed from the New York office of the Council.

CENSUS MONOGRAPH

American Agriculture: Its Structure and Place in the Economy, by Ronald L. Mighell. Sponsored by the Committee on Census Monographs. New York: John Wiley & Sons, April 1955. 199 pp. Cloth, \$5.00.

ANNOUNCEMENT

FULBRIGHT GRANTS IN EUROPE, THE

NEAR EAST, JAPAN AND PAKISTAN, 1956-57

The Committee on International Exchange of Persons, appointed by the Conference Board of Associated Research Councils, announces that applications for 1956–57 university lecturing and advanced research awards under the provisions of the Fulbright Act will be accepted between June 1 and October 1, 1955. A total of almost 300 awards will be offered in all disciplines. Countries included will be: Austria, Belgium and Luxembourg, Denmark, Finland, France, Germany, Greece, Iraq, Italy, Japan, Netherlands, Norway, Pakistan, and the United Kingdom and Colonial Dependencies.

Information on the program and application forms may be obtained from the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Avenue, Washington 25, D. C.

SOCIAL SCIENCE RESEARCH COUNCIL

230 PARK AVENUE, NEW YORK 17, N. Y.

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